

GeDiPNet Cluster 62 -- Top Shared Genes

Curated genes (disease_gdp) linked to 2 or more of this cluster's member diseases, most widely shared first. Data as of: 2026-10-07 03:15:01. · Rows: 169 · Generated: 2026-10-07 02:43:36

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
SCO2	6	14	Cardioencephalomyopathy, fatal infantile, due to cytochrome c oxidase deficiency; Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease; Mitochondrial encephalomyopathy
COX15	5	14	Cardioencephalomyopathy, fatal infantile, due to cytochrome c oxidase deficiency; Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
SURF1	5	14	Cardioencephalomyopathy, fatal infantile, due to cytochrome c oxidase deficiency; Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
COA5	4	14	Cardioencephalomyopathy, fatal infantile, due to cytochrome c oxidase deficiency; Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; mitochondrial disease
COA6	4	14	Cardioencephalomyopathy, fatal infantile, due to cytochrome c oxidase deficiency; Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; mitochondrial disease
COX10	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
COX4I1	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
COX8A	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
FARS2	4	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; mitochondrial disease; Mitochondrial encephalomyopathy
FASTKD2	4	14	Combined oxidative phosphorylation deficiency; Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; Mitochondrial disease
FOXRED1	4	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease; Mitochondrial encephalomyopathy
GFM2	4	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial disease; Sandhoff disease
LRPPRC	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
MTRFR	4	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial disease; Mitochondrial encephalomyopathy
NDUFS2	4	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease; Mitochondrial encephalomyopathy
NDUFV2	4	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease; Mitochondrial encephalomyopathy
PET100	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
PET117	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
SCO1	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
TACO1	4	14	Cytochrome c oxidase deficiency; Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
TMEM70	4	14	Mitochondrial complex deficiency; Mitochondrial disease; Mitochondrial encephalocardiomyopathy; Mitochondrial encephalomyopathy
ATP5F1A	3	14	Combined oxidative phosphorylation deficiency; Mitochondrial complex deficiency; Mitochondrial disease
ATP5MK	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
BCS1L	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
COA3	3	14	Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; Mitochondrial disease
COX14	3	14	Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; Mitochondrial disease
COX20	3	14	Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; Mitochondrial disease
COX5A	3	14	Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; mitochondrial disease
COX6A2	3	14	Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; Mitochondrial disease
COX6B1	3	14	Cytochrome c oxidase deficiency; Mitochondrial complex deficiency; Mitochondrial disease

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
COXFA4	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
CYTB	3	14	Mitochondrial complex deficiency; Mitochondrial disease; Mitochondrial encephalomyopathy
DNM1L	3	14	Leigh syndrome; Mitochondrial disease; Mitochondrial encephalomyopathy
EARS2	3	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial disease
FBXL4	3	14	Leigh syndrome; Mitochondrial disease; Mitochondrial encephalomyopathy
GTPBP3	3	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial disease
LONP1	3	14	Codas syndrome; Leigh syndrome; Mitochondrial encephalomyopathy
MRPS25	3	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease; Mitochondrial encephalomyopathy
MRPS34	3	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial disease
MTFMT	3	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial complex deficiency
NARS2	3	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial disease
ND2	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
ND3	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
ND5	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFA1	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
NDUFA10	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFA12	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
NDUFA13	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
NDUFA2	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFA9	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
NDUFAF2	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFAF3	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFAF4	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFAF5	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFAF6	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFAF8	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFB8	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
NDUFC2	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFS1	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFS3	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
NDUFS4	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFS7	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
NDUFS8	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
NDUFV1	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
NUBPL	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
POLG	3	14	Leigh syndrome; Mitochondrial disease; Mitochondrial encephalomyopathy
SDHA	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
SDHAF1	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
TARS2	3	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; mitochondrial disease
TIMMDC1	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
TRMT5	3	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease; Peripheral neuropathy with variable spasticity, exercise intolerance, and developmental delay
TSFM	3	14	Combined oxidative phosphorylation deficiency; Leigh syndrome; Mitochondrial disease
TTC19	3	14	Leigh syndrome; Mitochondrial complex deficiency; Mitochondrial disease
TYMP	3	14	Mitochondrial complex deficiency; Mitochondrial disease; Mitochondrial encephalomyopathy
UQCRQ	3	14	Leigh syndrome; Mitochondrial complex deficiency; mitochondrial disease
AARS2	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
AIFM1	2	14	Combined oxidative phosphorylation deficiency; Leigh syndrome
ATP5F1D	2	14	Mitochondrial complex deficiency; Mitochondrial disease
ATP5F1E	2	14	Mitochondrial complex deficiency; mitochondrial disease
ATP5MC3	2	14	Early-onset dystonia with spastic paraplegia; mitochondrial disease
ATP5PO	2	14	Mitochondrial complex deficiency; mitochondrial disease
ATP6	2	14	Mitochondrial complex deficiency; Mitochondrial disease
ATP8	2	14	Mitochondrial complex deficiency; Mitochondrial disease
ATPAF2	2	14	Mitochondrial complex deficiency; Mitochondrial disease
C1QBP	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
CARS2	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
COA8	2	14	Mitochondrial complex deficiency; Mitochondrial disease
COQ2	2	14	Leigh syndrome; Mitochondrial disease
COQ9	2	14	Leigh syndrome; Mitochondrial disease
COX1	2	14	Mitochondrial complex deficiency; Mitochondrial disease
COX11	2	14	Mitochondrial complex deficiency; mitochondrial disease
COX16	2	14	Mitochondrial complex deficiency; mitochondrial disease
COX2	2	14	Mitochondrial complex deficiency; Mitochondrial disease
COX3	2	14	Mitochondrial complex deficiency; Mitochondrial disease
COX4I2	2	14	Mitochondrial disease; Pancreatic insufficiency syndrome
CRLS1	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
CYC1	2	14	Mitochondrial complex deficiency; Mitochondrial disease
ECHS1	2	14	Leigh syndrome; mitochondrial short-chain enoyl-coa hydratase 1 deficiency
ELAC2	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
EME2	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
GFM1	2	14	Combined oxidative phosphorylation deficiency; Leigh syndrome
HIBCH	2	14	Leigh syndrome; Mitochondrial disease
IARS2	2	14	Leigh syndrome; mitochondrial disease
LIAS	2	14	Leigh syndrome; mitochondrial disease
LYRM7	2	14	Mitochondrial complex deficiency; Mitochondrial disease
MARS2	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MECR	2	14	Leigh syndrome; Mitochondrial disease
MFF	2	14	Leigh syndrome; Mitochondrial encephalomyopathy
MICOS13	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MIEF2	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease
MIPEP	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MRPL12	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease
MRPL3	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MRPL39	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MRPL44	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MRPS14	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease
MRPS16	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MRPS2	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease
MRPS22	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MRPS23	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease
MRPS28	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
MRPS7	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease
MTO1	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
NAXE	2	14	Leigh syndrome; mitochondrial disease
ND1	2	14	Mitochondrial complex deficiency; Mitochondrial disease
ND4	2	14	Mitochondrial complex deficiency; Mitochondrial disease
ND4L	2	14	Mitochondrial complex deficiency; Mitochondrial disease
ND6	2	14	Leigh syndrome; Mitochondrial disease
NDUFA11	2	14	Mitochondrial complex deficiency; Mitochondrial disease

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
NDUFA4	2	14	Leigh syndrome; Mitochondrial complex deficiency
NDUFA6	2	14	Mitochondrial complex deficiency; Mitochondrial disease
NDUFA8	2	14	Mitochondrial complex deficiency; Mitochondrial disease
NDUFAF1	2	14	Mitochondrial complex deficiency; Mitochondrial disease
NDUFB10	2	14	Mitochondrial complex deficiency; Mitochondrial disease
NDUFB11	2	14	Mitochondrial complex deficiency; Mitochondrial disease
NDUFB3	2	14	Mitochondrial complex deficiency; Mitochondrial disease
NDUFB7	2	14	Mitochondrial complex deficiency; mitochondrial disease
NDUFB9	2	14	Mitochondrial complex deficiency; mitochondrial disease
NDUFC2-KCTD14	2	14	Mitochondrial complex deficiency; Mitochondrial disease
NDUFS6	2	14	Mitochondrial complex deficiency; Mitochondrial disease
OPA1	2	14	Leigh syndrome; Mitochondrial disease
PDHA1	2	14	Leigh syndrome; mitochondrial disease
PDHX	2	14	Leigh syndrome; Mitochondrial disease
PNPT1	2	14	Combined oxidative phosphorylation deficiency; Leigh syndrome
PRORP	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
PTCD3	2	14	Combined oxidative phosphorylation deficiency; Leigh syndrome
RMND1	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
SDHB	2	14	Mitochondrial complex deficiency; Mitochondrial disease
SDHD	2	14	Mitochondrial complex deficiency; Mitochondrial disease
SFXN4	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
SLC25A10	2	14	Mitochondrial complex deficiency; Mitochondrial disease
SLC25A26	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
SLC25A4	2	14	Leigh syndrome; Mitochondrial disease
SUCLA2	2	14	Leigh syndrome; mitochondrial disease
TAMM41	2	14	Combined oxidative phosphorylation deficiency; mitochondrial disease
TIMM22	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
TMEM126B	2	14	Mitochondrial complex deficiency; Mitochondrial disease
TOMM70	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
TRIT1	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
TRMT10C	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease
TRMU	2	14	Leigh syndrome; Mitochondrial disease
TUFM	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease

Gene	Member Diseases Linked	Cluster Size	Linked Diseases
UQCC2	2	14	Mitochondrial complex deficiency; mitochondrial disease
UQCC3	2	14	Mitochondrial complex deficiency; mitochondrial disease
UQCRB	2	14	Mitochondrial complex deficiency; mitochondrial disease
UQCRC2	2	14	Mitochondrial complex deficiency; Mitochondrial disease
UQCRFS1	2	14	Mitochondrial complex deficiency; mitochondrial disease
UQCRH	2	14	Mitochondrial complex deficiency; mitochondrial disease
VARs2	2	14	Combined oxidative phosphorylation deficiency; Mitochondrial disease